

10/702,038
DOCKET NO. P21-163397M/YS

9

REMARKS

Applicants submit a Petition and Fee for Two-Months Extension of Time.

Claims 1-26 are all the claims presently pending in the application. Claims 4, 9-10, and 25-26 are amended to more clearly define the invention. Claims 1, 10, and 25-26 are independent.

These amendments are made only to more particularly point out the invention for the Examiner and not for narrowing the scope of the claims or for any reason related to a statutory requirement for patentability.

Applicants also note that, notwithstanding any claim amendments herein or later during prosecution, Applicants' intent is to encompass equivalents of all claim elements.

Entry of this §1.116 Amendment is proper. Since the Amendments above narrow the issues for appeal and since such features and their distinctions over the prior art of record were discussed earlier, such amendments do not raise a new issue requiring a further search and/or consideration by the Examiner. As such, entry of this Amendment is believed proper and Applicant earnestly solicits entry. No new matter has been added.

Applicants gratefully acknowledge the Examiner's indication that claims 3-4 and 13-20 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. However, Applicants respectfully submit that all of the claims are allowable.

Claims 25-26 stand rejected under 35 U.S.C. § 103(a) as being obvious in view of the Taranto reference. Claims 1-2, 5-12, and 21-24 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the Taranto reference in view of the Jackson et al. reference.

These rejections are respectfully traversed in the following discussion.

10/702,038
DOCKET NO. P21-163397M/YS

10

I. THE CLAIMED INVENTION

A first exemplary embodiment of the claimed invention, as defined by, for example, independent claim 10, is directed to a lock that includes a cam with a pair of engaging holes, a slide pin with a bifurcated structure that has elastic pieces that each include projections that each engage a corresponding one of the pair of engaging holes, and an O-ring in a containing groove on the cam. The containing groove communicates with a cam groove in the cam.

A second exemplary embodiment of the claimed invention, as defined by, for example, independent claim 26, is directed to a lock that includes a cam with a pair of engaging holes, and a slide pin with a bifurcated structure that includes elastic pieces that each have projections that each engage a corresponding one of the pair of engaging holes. Rotation of the slide pin with respect to the cam disengages the projections from the engagement holes.

Conventional locks include link levers that are fixed to corresponding slide pins. Thus, when a glove box that incorporates such a conventional lock is damaged, the slide pins cannot be easily removed from the link levers and it becomes impossible to reuse the slide pin.

Further, because it is impossible to remove the slide pins from the link levers, it becomes impossible to detach a housing containing the link lever and an operation handle from the glove box and it is, therefore, impossible to reuse the housing and operation handle.

Additionally, if a cylinder lock is provided at the housing, then it also becomes impossible to reuse the cylinder lock unless the housing is destroyed.

Moreover, when the handle of a conventional lock is released the lock may emit an impact sound. Some conventional locks incorporate a buffer member which may be pasted

10/702,038
DOCKET NO. P21-163397M/YS

11

onto the impacting regions. However, these buffer members may become worn and/or destroyed.

In stark contrast to these conventional locks, the present invention provides a lock where rotation of a slide pin with respect to a corresponding cam disengages a projection on the slide pin from the engagement holes in the cam. In this manner, when a glove box is destroyed the slide pin may be easily disengaged from the cam, for example, by merely rotating them relative to each other. Thereby allowing the slide pin, cam member, etc., to be reused and maintenance is significantly improved. (Page 8, lines 15-25).

In further contrast, to the conventional locks, the present invention provides a lock with an O-ring in a containing groove on a cam where the containing groove communicates with a cam groove in the cam. In this manner, the present invention provides an O-ring which provides a sliding resistance that restrains any impact noise. The O-ring is provided in a containing groove that communicates with the cam groove which, as a result, enables the cam member to be downsized.

II. THE PRIOR ART REJECTIONS

A. The Taranto reference

Regarding the rejection of claims 25-26, the Examiner alleges that it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of the Taranto reference to form the claimed invention. Applicants submit, however, that it would not have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of the Taranto reference to form the claimed invention.

The Examiner fails to present a *prima facie* case of obviousness for at least two

10/702,038
DOCKET NO. P21-163397M/YS

12

reasons: 1) the Examiner has failed to provide any suggestion and/or motivation which would motivate one of ordinary skill in the art to replace the engagement groove with engagement holes; and 2) the Examiner has failed to provide any reference which discloses engagement holes, let alone that teaches that engagement holes are the functional equivalent of the engagement groove.

"ESTABLISHING A PRIMA FACIE CASE OF OBVIOUSNESS"

"To establish a prima facie case of obviousness three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine references teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations." (Emphasis original, M.P.E.P. § 2142, see also § 2143).

In the present instance, the Examiner has failed to present a *prima facie* case of obviousness by failing to provide "some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference" and by failing to provide a prior art reference that teaches or suggests all the claim limitations.

The Examiner admits that the Taranto reference "does not disclose engagement holes." The Examiner does not provide any prior art reference which teaches engagement holes. Therefore, the Examiner clearly fails to satisfy the requirement for a *prima facie* case of obvious of a "prior art reference (or references when combined) must teach or suggest all

10/702,038
DOCKET NO. P21-163397M/YS

13

the claim limitations.”

The Examiner also fails to present a *prima facie* case of obviousness by failing to provide “some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference.”

Rather, the Examiner merely alleges that engagement holes are the “functional equivalents” to the annular recess 62 that is disclosed by the Taranto reference.

***“COMBINING EQUIVALENTS KNOWN FOR THE SAME
PURPOSE”***

“It is prima facie obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition to be used for the very same purpose [T]he idea of combining them flows logically from their having been individually taught in the prior art.” (Emphasis added, M.P.E.P. § 2144.06).

In the present instance, the idea of combining them cannot “flow” because they are not “individually taught” in the applied references. The Examiner has not provided a prior art reference that discloses engagement holes, let alone a prior art reference which teaches that engagement holes are the functional equivalent of an annular groove.

Moreover, even assuming for the sake of argument, that the Examiner is able to locate prior art which not only discloses engagement holes, but which also teaches that engagement holes are the functional equivalent of the annular groove that is disclosed by the Taranto reference, such teachings would still be insufficient to provide a *prima facie* case of obviousness.

“SUBSTITUTING EQUIVALENTS KNOWN FOR THE SAME

10/702,038
DOCKET NO. P21-163397M/YS

14

PURPOSE"

*"In order to rely on equivalence as a rationale supporting an obviousness rejection, the equivalency must be recognized in the prior art, and cannot be based on applicant's disclosure or the mere fact that the components at issue are function or mechanical equivalents. . . .The Board found the claimed invention would have been obvious, reasoning that the prior art foam core is the function and mechanical equivalent of the claimed paper core. The court reversed, holding that components which are functionally or mechanically equivalent are not necessarily obvious in view of one another . . .
Smith v. Hayashi."*

Therefore, even if the Examiner is able to locate prior art which not only discloses engagement holes, but which also teaches that engagement holes are the functional equivalent of the annular groove that is disclosed by the Taranto reference, such a disclosure of functional equivalency is not sufficient to establish a *prima facie* case of obviousness. The Examiner would still be required to provide a motivation for one of ordinary skill in the art to substitute engagement holes for the annular groove.

Clearly, the Examiner has not even attempted to allege any motivation at all.
Therefore, the Examiner fails to present a *prima facie* case of obviousness.

Indeed, the Examiner's allegation that such are "functional equivalents" nullifies any future attempt by the Examiner to allege that one of ordinary skill in the art would have been motivated to substitute engagement holes for the annular recess 62. Even assuming arguendo that the Examiner had cited a prior art reference which disclosed engagement holes as recited by the claims, one of ordinary skill in the art would not have been motivated to replace the

10/702,038

15

DOCKET NO. P21-163397M/YS

annular recess 62 with such engagement holes because the Examiner has admitted that the annular recess 62 is the functional equivalent of engagement holes. If, as alleged by the Examiner, they are functionally equivalent, there clearly can be no motivation to replace the annular groove that is disclosed by the Taranto reference by engagement holes (which are not disclosed anywhere).

Therefore, one of ordinary skill in the art would not have been motivated to modify the teachings of the Taranto reference to form the claimed invention. Applicants respectfully request withdrawal of this rejection.

B. The Taranto reference in view of the Jackson et al. reference

Regarding the rejections of claims 1-2, 5-12, and 21-24, the Examiner alleges that the Jackson et al. reference would have been combined with the Taranto reference to form the claimed invention. Applicants submit, however, that these references would not have been combined and even if combined, the combination would not teach or suggest each and every element of the claimed invention.

None of the applied references teaches or suggests the features of the claimed invention including a lock with an O-ring in a containing groove on a cam where the containing groove communicates with a cam groove in the cam. As explained above, this feature is important for providing a sliding resistance that restrains any impact noise while enabling the cam member to be downsized.

Indeed, the Examiner never alleges that any of the applied references teaches or suggests these features.

The Examiner admits that the Taranto reference does not teach or suggest an O-ring.

10/702,038
DOCKET NO. P21-163397M/YS

16

The Examiner attempts to remedy this deficiency by referring to the Jackson et al. reference. However, the Jackson et al. reference does not remedy all of the deficiencies of the Taranto reference because the Jackson et al. reference also does not teach or suggest an O-ring in a containing groove on a cam where the containing groove communicates with a cam groove in the cam.

Further, Applicants respectfully submit that contrary to the Examiner's allegation, one of ordinary skill in the art would not have been motivated to modify the teachings of the Taranto reference with the O-ring that is disclosed by the Jackson et al. reference "in order to create a fluid-tight seal."

The Jackson et al. reference teaches that the motivation for providing a fluid-tight seal is that the latch mechanism that is disclosed by the Jackson et al. reference is intended to be used on an exterior panel of an aircraft so as to secure a first aircraft structure, such as an aircraft panel or cowling, to a second aircraft structure, and that it is desirable to prevent a flow through the latch mechanism "into the interior of the aircraft" and also to prevent "Fluid, such as pressurized air, flowing outwardly from an internal compartment of an aircraft."

The latch structure that is disclosed by the Taranto reference does not suffer from these problems.

Indeed, it is not possible to use the latch structure that is disclosed by the Taranto reference to secure a first panel to a second panel, let alone to "secure a first aircraft structure, such as an aircraft panel or cowling, to a second aircraft structure."

Rather, and in stark contrast, the latch that is disclosed by the Taranto reference is intended to be used and is only disclosed as being used on a glove box of a vehicle.

The glove box latch that is disclosed by the Taranto reference does not suffer from the

10/702,038
DOCKET NO. P21-163397M/YS

17

problems that are addressed by the Jackson et al. reference. The Taranto reference does not mention anything at all that is even remotely related to a desire to keep fluids from flowing through a latch in a glove box door.

Further, the Jackson et al. reference does not teach or suggest that it is important to prevent fluid flow within glove box latches. Rather, the Jackson et al. reference is only concerned with aircraft exterior panel latches and the problem with permitting fluid flow through these latches and does not teach or suggest that glove box latches suffer from fluid flow.

Clearly, the Examiner's alleged motivation is completely inapplicable and irrelevant to glove box latches and Applicants respectfully submit that one of ordinary skill in the art would not have been motivated to modify the glove box latch that is disclosed by the Taranto reference to include an O-ring because the Jackson et al. reference teaches that an O-ring is valuable for preventing fluid flow to prevent a flow through the latch mechanism "into the interior of the aircraft" and also to prevent "Fluid, such as pressurized air, flowing outwardly from an internal compartment of an aircraft."

Moreover, Applicant respectfully submits that these references would not have been combined as alleged by the Examiner because the references are directed to completely different matters and problems.

In particular, the Taranto reference is concerned with the problem of "retaining the glove box of the vehicle in a closed position during a crash." (Col. 1, lines 23 - 61).

In stark contrast, the Jackson et al. reference is concerned with the completely different and unrelated problem of providing a latch mechanism to "releasably secure a first aircraft structure, such as an aircraft panel or cowling, to a second aircraft structure " while

10/702,038
DOCKET NO. P21-163397M/YS

18

preventing "a liquid or gas, to flow through the latch mechanism between the exterior of the panel and the interior of the panel." (Col. 1, lines 5 - 59).

One of ordinary skill in the art who was concerned with the problem of retaining a glove box of a vehicle in a closed position during a crash, as the Taranto reference is concerned with addressing, would not have referred to the Jackson et al. reference, and vice-versa, because the Jackson et al. reference is concerned with the completely different and unrelated problems of releasably securing a first aircraft structure, such as an aircraft panel or cowl, to a second aircraft structure while preventing a liquid or gas from flowing through the latch mechanism between the exterior of the panel and the interior of the panel. Thus, one of ordinary skill in the art would not have combined these references.

Further, with respect to claims 10-12 and 21, as explained above, the Examiner clearly fails to present a *prima facie* case of obviousness by failing to provide any prior art reference which discloses engagement holes, by failing to provide any prior art reference which teaches that engagement holes are the functional equivalent of an annular groove, and by failing to provide a prior art reference which provides a motivation for replacing the annular groove which is disclosed by the Taranto reference with an undisclosed engagement holes.

Therefore, the Examiner is respectfully requested to withdraw these rejections of claims 1-2, 5-12, and 21-24.

III. FORMAL MATTERS AND CONCLUSION

In view of the foregoing amendments and remarks, Applicants respectfully submit that claims 1-26, all the claims presently pending in the Application, are patentably distinct over the prior art of record and are in condition for allowance. The Examiner is respectfully

10/702,038
DOCKET NO. P21-163397M/YS

19

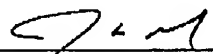
requested to pass the above application to issue at the earliest possible time.

Should the Examiner find the Application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary in a telephonic or personal interview.

The Commissioner is hereby authorized to charge any deficiency in fees or to credit any overpayment in fees to Attorney's Deposit Account No. 50-0481.

Respectfully Submitted,

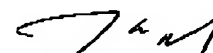
Date: 3/7/06


James E. Howard
Registration No. 39,715

McGinn Intellectual Property Law Group, PLLC
8321 Old Courthouse Rd., Suite 200
Vienna, Virginia 22182
(703) 761-4100
Customer No. 21254

CERTIFICATION OF FACSIMILE TRANSMISSION

I hereby certify that I am filing this Amendment After-Final Rejection Under 37 CFR §1.116 by facsimile with the United States Patent and Trademark Office to Examiner Christopher J. Boswell, Group Art Unit 3676 at fax number (571) 273-8300 this 7th day of March, 2006.


James E. Howard
Registration No. 39,715